order to support the Commission's benchmark analysis, Pacific has agreed that, in the event that the California PUC establishes higher permanent rates, Pacific will seek a true up only to the extent that the new rate falls within the Texas benchmark. See Vandeloop Aff. ¶ 50. Of course, the rates that the California PUC ultimately establishes as a result of its review of cost studies in the 2001/2002 Relook Process will apply prospectively, regardless of their relationship to the Texas benchmark.[32]

Finally, in 1999, the California PUC approved rates for DS-1 loops, DS-1 entrance facilities, and DS-3 entrance facilities. See OANAD Pricing Decision at 104-09, 259-60 (Ordering ¶¶ 33-43) & Apps. A, B; Vandeloop Aff. ¶ 51. The TELRIC-based DS-3 entrance facility price was subsequently used to establish a DS-3 loop price. See Scholl Aff. ¶ 113. The California PUC is currently re-examining the rates for DS1 and DS3 loops in the 2001/2002 Relook Process, and it is likely that new rates will be established for these elements at the conclusion of that proceeding. In order to eliminate any concerns about the current rates for these elements, Pacific has committed to treat the current DS-1 and DS-3 loop rates as interim from the date of this filing (September 20, 2002), subject to true-up to the final rates set by the California PUC in the 2001/2002 Relook Process. See Vandeloop Aff. ¶ 54; Accessible Letter CLECC02-267 (App. G, Tab 57).

[32] See Georgia/Louisiana Order ¶ 25 ("Benchmarking is used for the limited purpose of providing confidence that a rate, despite its potential TELRIC errors, falls within the range that a reasonable application of TELRIC would produce. We do not, however, regard failure to meet a benchmark, by itself, as evidence that a state commission failed to reasonably apply TELRIC in setting UNE rates.").

For the foregoing reasons, Pacific's UNE rates in California fully comply with the FCC's pricing regulations and with section 252(d)(1).

6. Nondiscriminatory Access to OSS

In this Application, Pacific demonstrates that it has developed electronic and manual interfaces that provide competing carriers, on a nondiscriminatory basis, access to all of the OSS functions identified in the Commission's orders. See generally Huston/Lawson Joint Aff.; Henry Aff. (App. A, Tab 10); Johnson Aff.; E. Smith Aff. (App. A, Tab 21); Flynn Aff. (App. A, Tab 7); see also Georgia/Louisiana Order ¶ 102; Kansas/Oklahoma Order ¶¶ 104-105; New York Order ¶¶ 88, 90. These systems are in place, fully operational, handling commercial volumes, and satisfy the requirements of the Act in all respects. Moreover, these systems already were subject to an independent, third-party test, which Pacific passed with flying colors.

In April 2002, pursuant to the SBC-Ameritech Merger Conditions – under which SBC agreed to develop and deploy, in consultation with CLECs, uniform and enhanced interfaces – and its Change Management Process, discussed below, Pacific implemented its Uniform and Enhanced Plan of Record in California. See Huston/Lawson Joint Aff. ¶¶ 254-256. This release was unprecedented in size and scope – requiring modification or creation of almost 5,000 program modules, close to 400 interfaces, more than 6,000 software edits, and more than 200 databases – and was extensively tested and reviewed with CLECs prior to implementation. See id. ¶¶ 256-258. This release provided CLECs with substantially enhanced functionality throughout the various OSS domains, as well as the ability to use uniform interfaces in all of SBC's regions. See id. ¶ 258. To the extent CLECs raised issues with this release, Pacific

worked cooperatively with the CLECs and resolved those issues in a timely fashion. See id. ¶¶ 259-270.

Commercial Usage. This Commission has repeatedly found that the most probative evidence that a BOC's OSS are operationally ready is actual commercial usage. See Georgia/Louisiana Order App. D, ¶ 31; Arkansas/Missouri Order App. D, ¶ 31; Kansas/Oklahoma Order ¶ 105; New York Order ¶ 89. There is no doubt that Pacific's OSS are handling commercial volumes; indeed, Pacific's OSS handle far more pre-order transactions and create more service orders than SWBT's OSS at the time SWBT's 271 application was filed in Texas. See Huston/Lawson Joint Aff. ¶¶ 12, 17. Between March and July 2002, for example, Pacific's EDI/CORBA interface processed more than 5.9 million pre-order transactions and the EDI interface was used to create more than 1.4 million service orders. See id. ¶¶ 10, 16. Pacific's ability to handle the increasing commercial volumes in California also demonstrates that its electronic and manual OSS are scalable to meet reasonably foreseeable CLEC demands. See id. ¶¶ 10-11, 16-17, 24-28; see also Henry Aff. ¶¶ 13-18; Cusolito Aff. ¶¶ 9-14 (App. A, Tab 4).

Third-Party Test. In addition to this evidence of commercial usage, Pacific's OSS were subjected to 18 months of functional and capacity testing by independent third parties and supervised by the California PUC, with substantial involvement by CLECs. See Huston/Lawson Joint Aff. ¶¶ 29-82. As noted above, Pacific's OSS passed this test with flying colors. See id. ¶ 29. The third-party reviewers, Cap Gemini and GXS, found that Pacific's systems process CLEC transactions in a nondiscriminatory fashion and can do so at reasonably foreseeable levels of demand. Specifically, the third-party reviewers concluded that "Pacific's OSS are robust and

reliable," TG Report § 2.2,[33] that its "[s]ystems performed well under volume stress," TAM Report § 3.2.1,[34] and that "Capacity Planning for systems and personnel is well ahead of demand," id. § 4.2.2.6.4.[35]

As in New York and Texas, the test in California was conducted by independent reviewers. See Huston/Lawson Joint Aff. ¶ 44; see also New York Order ¶¶ 96-100; Texas Order ¶¶ 101-104. Moreover, numerous precautions were taken to ensure that the test was, to the extent possible, both independent and blind. See Huston/Lawson Joint Aff. ¶ 45; see also New York Order ¶ 99; Massachusetts Order ¶ 45. To that end, the test involved four "pseudo-CLECs" – the number proposed by the California CLECs – which submitted requests for services and facilities using the same processes as real CLECs. See Huston/Lawson Joint Aff. ¶ 44. Moreover, Pacific was unaware of either the mix or the timing of test scenarios submitted over its interfaces. See id. ¶ 45.

As discussed below, Pacific's commercial evidence, coupled with the results of the independent third-party test, demonstrates that Pacific provides nondiscriminatory access to each of the key OSS functions identified in the Commission's orders.

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[33] GE Global eXchange Service, Final Report Presented to California Public Utilities Commission for Test Generation Services in Relation to Pacific Bell's Operations Support System (Dec. 12, 2000) ("TG Report") (App. D, Tab 206).

[34] Cap Gemini Ernst & Young, Final Report of the Pacific Bell Operational Support Systems (Dec. 15, 2000) ("TAM Report") (App. D, Tab 208).

[35] To the extent that Cap Gemini and GXS raised issues with Pacific's OSS, Pacific has addressed all of those issues. See Huston/Lawson Joint Aff. ¶¶ 80-81. The California PUC subsequently retained Cap Gemini and GXS to assess Pacific's response to 19 of the recommendations raised during the OSS test; those reviewers found that Pacific had appropriately responded to each of those 19 issues. See id. ¶ 82.

a. Pre-Ordering

In addition to manual processes for pre-ordering through the LSC and LOC, Pacific offers CLECs in California a choice of four "real time" electronic interfaces – Uniform DataGate, Enhanced Verigate, and the industry standard Electronic Data Interchange ("EDI") and Common Object Request Broker Architecture ("CORBA") interfaces. See id. ¶ 111.

Uniform DataGate is an application-to-application electronic interface that is designed to be used by CLECs that have their own software programs or applications. Id. ¶ 121. DataGate allows CLECs to connect their mechanized OSS directly to Pacific's systems, thereby minimizing the need for manual entry of data. See id. As validated in the OSS test, DataGate can be integrated with Pacific's EDI ordering gateway to provide an integrated pre-ordering and ordering system. See id. ¶¶ 50, 121. DataGate has processed more than 365,000 direct pre-ordering transactions in July 2002 alone. See id. ¶ 122.

Enhanced Verigate is a graphical user interface, which is launched from the Pacific Toolbar platform, that operates with Windows™ and provides CLECs with access, in plain English, to pre-ordering functions available from Pacific's "legacy" systems. See id. ¶ 123. In July 2002, 88 CLECs submitted a total of more than 438,000 pre-order transactions via Enhanced Verigate. See id. ¶ 125.

Both EDI and CORBA are structural protocols based on industry-wide standards. See id. ¶¶ 116-117. EDI and CORBA overlay (or "front-end") Pacific's Uniform DataGate, preserving its commercially proven functionality, data content, and performance standards while allowing for an industry standard application-to-application interface that can be integrated with CLECs' own systems and that supports both resale services and UNEs. See id. ¶ 116. Like DataGate,

moreover, the EDI and CORBA pre-ordering gateways can be integrated with Pacific's EDI ordering gateway. See id. In July 2002, 18 CLECs submitted transactions using Pacific's EDI and CORBA pre-ordering gateways. See id. ¶ 119. During that same month, the EDI and CORBA gateways processed more than 1.1 million pre-ordering transactions. See id.

Pacific's pre-ordering interfaces allow competing carriers to obtain the same information from the same underlying OSS as Pacific's own retail service representatives. Specifically, CLECs are able to perform the following pre-ordering functions, among others: (1) retrieve customer service information ("CSI" or "CSR"); (2) validate addresses; (3) select and reserve telephone numbers; (4) determine services and features available to a customer; (5) obtain due date availability; (6) access loop qualification information[36]; (7) view a customer's directory listing; and (8) check the status of pending orders. See id. ¶ 112; New York Order ¶ 132.

In each of the past three months, Pacific's DataGate, Verigate, and EDI interfaces met or exceeded the benchmarks for nine of the eleven submeasures established by the California PUC for responsiveness to CLEC pre-ordering transactions (other than the loop qualification submeasures, which are discussed below, see infra Part II.D.1.a). See Johnson Aff. ¶ 59 & Attach. B (PM 1); see also Huston/Lawson Joint Aff. ¶¶ 51-53, 57 (discussing third-party functionality and capacity testing of these interfaces).[37] In addition, during that same time

[36] Loop qualification is discussed in Part II.D.1, infra.

[37] For one of the other two submeasurements (PM 1-04601), Pacific met the 4.5-second benchmark in June and missed it by about 0.5 seconds in July, which is not competitively significant. See Johnson Aff. ¶ 59 & Attach. B (PM 1-04601). For the other submeasurement (PM 1-04901), Pacific has missed the two-second benchmark by an average of less than 0.5 seconds in the past three months; again, this is not competitively significant. See id. ¶ 59 & Attach. B (PM 1-04901).

period, Pacific satisfied in at least two of the past three months all but one of the standards for interface availability that the California PUC has established. See Johnson Aff. ¶ 96 & Attach. B (PM 42). And, even for the one standard that Pacific has not met (PM 42-00800), its Enhanced Verigate interface has been available at least 99 percent of the time in June and July, just slightly missing the 99.25 percent benchmark. See id.

Integration. As noted above, CLECs are able to integrate the DataGate, EDI pre-ordering, and CORBA interfaces with Pacific's EDI ordering interface. During the state proceedings, no CLEC disputed that Pacific's application-to-application interfaces could be integrated. See Huston/Lawson Joint Aff. ¶ 139.

This Commission has recognized that "a BOC can demonstrate the ability of competitive LECs to integrate pre-ordering and ordering functions if the BOC parses the customer record information into identifiable fields for the competing carriers." Georgia/Louisiana Order ¶ 120; see New York Order ¶ 137. Each of Pacific's four pre-ordering interfaces provide CLECs with parsed customer service information ("CSI"), according to industry standards. See Huston/Lawson Joint Aff. ¶ 131.[38] Moreover, the parsed fields are synchronized with the associated ordering fields, so that they can be directly mapped onto a Local Service Request ("LSR") without the CLEC needing to adjust or reconfigure the fields. See id. ¶ 133.[39] Pacific engaged an independent third-party, Nightfire Software, Inc. ("Nightfire"), to review the parsed

[38] Pacific has provided parsed address information since 1998. See Huston/Lawson Joint Aff. ¶ 137.

[39] Pacific has parsed 148 different fields, which represents 100 percent of the fields that are used in the ordering process. See Huston/Lawson Joint Aff. ¶¶ 134-135; see also Georgia/Louisiana Order ¶ 130.

CSI that Pacific provides. Nightfire found that all of the pre-ordering fields were parsed consistent with Pacific's documentation. See id. ¶ 136. Nightfire also developed an "Integration Manager" that enabled it successfully to place pre-ordering transactions through Pacific's EDI pre-ordering interface, store the information received in its back-end systems, and then automatically populate that information onto LSRs that were successfully submitted through Pacific's EDI ordering interface. See id. ¶¶ 140-141. This evidence clearly demonstrates that Pacific has "enable[d] *successful* integration." Georgia/Louisiana Order ¶ 119; see also id. ¶ 126 (relying on similar evidence).

Even before Pacific provided CLECs with a fully parsed CSI, CLECs were able to integrate Pacific's application-to-application pre-ordering and ordering interfaces. See Huston/Lawson Joint Aff. ¶ 146. During the third-party test, GXS validated that DataGate can be integrated with Pacific's EDI Gateway to provide an integrated pre-ordering and ordering system. See id. ¶ 146. In addition, Nightfire and Telcordia confirm that they, too, had been able to parse the information Pacific provided and to use that information automatically to populate LSRs. See id. ¶ 147. Nightfire and Telcordia made their integration products commercially available to CLECs operating in California. See id. Attachs. S & T. Thus, Pacific enabled successful integration even before it provided parsed customer record information. See Georgia/Louisiana Order ¶¶ 123-124 (relying on similar evidence).

b. Ordering and Provisioning

Pacific provides CLECs with a choice of three electronic interfaces for ordering and provisioning – EDI, Web-LEX, and SORD – as well as the option to send orders by fax. See Huston/Lawson Joint Aff. ¶ 156; Henry Aff. ¶ 20.[40]

Pacific's EDI ordering gateway provides CLECs with an electronic interface that conforms to national standards and that supports the ordering and provisioning of both resale services and UNEs. See Huston/Lawson Joint Aff. ¶ 160. EDI enables a CLEC electronically to submit local service requests to Pacific, and to receive acknowledgments, confirmations, and completion status utilizing its interface. See id. Further, as explained above, CLECs can integrate the EDI ordering gateway with either DataGate or EDI and CORBA to provide an integrated pre-ordering and ordering system. See id. In July 2002, 61 CLECs originated a total of more than 349,000 service orders using the EDI ordering gateway. See id. ¶ 161.

Web-LEX is a web browser-based, graphical user interface developed for CLECs by Pacific, based on industry standards, and launched from Pacific's Toolbar platform. See id. ¶ 162. Web-LEX enables CLECs electronically to create and transmit resale and UNE LSRs to Pacific, as well as to receive acknowledgments and notification of error details from Pacific, and to track firm order confirmation ("FOC") and service order completion ("SOC") status. See id. In July 2002, CLECs originated more than 64,000 service orders through the input of LSRs directly into Web-LEX. See id. ¶ 164.

[40] Pacific additionally accepts electronic orders for local interconnection trunks and dedicated facilities using the Access Services Request ("ASR") process. See Huston/Lawson Joint Aff. ¶¶ 183-185.

The SORD interface is used by Pacific's retail service representatives to create, edit, distribute, and control requests for changes to customers' services and account records. See id. ¶¶ 165-166. SORD enables CLECs to perform all ordering functions for resold services and unbundled network elements, including certain complex ordering functions for those resold services and unbundled network elements that EDI and LEX cannot handle. See id.

Firm Order Confirmations and Reject Notifications. Pacific provides electronic FOCs and reject notices for those LSRs submitted electronically. See id. ¶¶ 187-190; Henry Aff. ¶ 22. From May through July 2002, Pacific's LEX and EDI interfaces returned FOCs within the benchmark established by the California PUC in at least two of the three months on all but three of the more than 50 disaggregated submeasurements for electronically received and electronically handled LSRs with three months of data. See Johnson Aff. ¶¶ 68-69; see also id. ¶¶ 70-72 (discussing Pacific's performance in returning FOCs for manually handled orders). In addition, Pacific's performance in returning timely reject notices was nearly perfect in May through July 2002, meeting the benchmark on each of the 21 disaggregated measurements in at least two of those three months. See Johnson Aff. ¶¶ 74-75.

Flow Through. The Commission has looked to flow-through rates as a general indicator of the performance of a BOC's OSS. See, e.g., New Jersey Order ¶ 130; Massachusetts Order ¶ 77; Johnson Aff. ¶¶ 76-83. The Commission, however, has focused on evidence that a BOC's OSS are capable of flowing through competing carriers' orders in substantially the same time and manner as its own orders. See Massachusetts Order ¶ 78. During the third-party test of Pacific's OSS, the Test Generator obtained flow-through rates of more than 97 percent of orders during one test and more than 93 percent during a second test. See Huston/Lawson Joint Aff.

¶ 55. In addition, Pacific's flow-through rates for various product types – resale, UNE-P, and UNE loop – are comparable to rates that the Commission previously has found satisfy the requirements of the Act. See id. ¶¶ 193, 196; Massachusetts Order ¶ 78. From May through July 2002, the resale total flow-through rate has ranged from 62 to 79 percent, the UNE-P total flow-through rate has ranged from 84 to 85 percent, and the UNE loop total flow-through rate from 46 to 52 percent. See Huston/Lawson Joint Aff. ¶ 193.[41]

Moreover, these aggregate flow-through rates understate the true capabilities of Pacific's OSS. Individual CLECs have achieved flow-through levels much higher than the average. For example, from May through July 2002, individual CLECs' total flow-through rates have ranged from 0 to 92 percent for resale orders, 37 to 94 percent for UNE-P orders, and 24 to 91 percent for UNE loop orders. See id. ¶ 195 & Attach. X. The Commission has recognized that, because all competing carriers interface with the same system, such a wide range of flow-through results strongly implies that the CLECs, rather than the BOC, are largely responsible for any "poor" flow-through performance. See New York Order ¶¶ 166-167, 181; Massachusetts Order ¶ 78. In addition, this Commission has repeatedly stated that it will not hold a BOC accountable for orders that fail to flow through for reasons within CLECs' control. See Massachusetts Order ¶¶ 75, 78; Kansas/Oklahoma Order ¶¶ 143, 146.

[41] Pacific's flow-through performance for resale orders in July 2002 (62 percent) was affected by one CLEC, which submitted requests to generate more than 4,400 service orders to migrate another CLEC's coin accounts. See Huston/Lawson Joint Aff. ¶ 194. Such orders are not flow-through eligible. See id. Excluding those service orders for this CLEC from total flow-through results in July, total flow through would have measured 74 percent – which is in line with results in May and June. See id.

Jeopardy Notices. Pacific's OSS return all applicable, industry-standard jeopardies electronically through EDI and LEX, depending on the interface over which the CLEC submitted its order. See Huston/Lawson Joint Aff. ¶ 198. Pacific also provides CLECs with an additional jeopardy notification, via either electronic mail or a phone call. See Henry Aff. ¶ 38. Pacific has met the vast majority of the performance standards that the California PUC established for the percentage of orders jeopardied and the jeopardy notice interval in at least two out of the last three months for which data are available. See Johnson Aff. Attach. B (PMs 5 & 6).

Completion Notifications. Once work for a service order is physically completed, that order is sent through Pacific's SORD system, which places the order into "Completion" status. See Huston/Lawson Joint Aff. ¶ 199. A SOC is then provided to the CLEC via EDI or LEX, depending on the interface the CLEC used to submit its order. See id. Pacific provides CLECs with better than parity service, as it does not provide SOCs to its retail representatives, who must instead access SORD directly to view completion status. See id. For fully electronic resale and UNE orders, in each month from May through July 2002, Pacific satisfied the benchmark that the California PUC established. See Johnson Aff. ¶ 85 & Attach. B (PM 18-00101); see also id. ¶¶ 86-87 (discussing Pacific's performance in returning SOCs for manually handled orders.)[42]

Provisioning. There are no separate provisioning interfaces that CLECs access because provisioning is essentially internal to Pacific once an order is submitted. See Huston/Lawson

[42] In April 2002, Pacific began providing CLECs with electronic Post-to-Bill notifications, which inform a CLEC that its requested service change is reflected in Pacific's billing systems. See Huston/Lawson Joint Aff. ¶ 201. The performance measurements adopted by the California PUC currently require Pacific to report its performance in updating its billing systems within 3 days after order completion. From May through July 2002, Pacific consistently exceeded the 95 percent standard the PUC established. See Johnson Aff. ¶ 95.

Joint Aff. ¶¶ 155, 174. Indeed, the systems and processes for most CLEC orders are the same as those used to provision Pacific's retail orders. See Motta Aff. ¶¶ 5-11 (App. A, Tab 15). Pacific's provisioning performance "with respect to provisioning timeliness and . . . provisioning quality" are discussed in the Affidavits of Gwen S. Johnson and Richard J. Motta. Kansas/Oklahoma Order ¶ 154.[43]

c. Maintenance and Repair

Pacific provides CLECs a choice of three electronic interfaces for maintenance and repair: Electronic Bonding Trouble Administration Graphical User Interface ("EBTA-GUI"), Electronic Bonding Trouble Administration ("EBTA"), Toolbar Trouble Administration ("TBTA"). See Huston/Lawson Joint Aff. ¶ 210.

EBTA-GUI is SBC's web-based maintenance and repair GUI, which was implemented in California in December 2001 as part of SBC's Uniform and Enhanced Plan Of Record. See Huston/Lawson Joint Aff. ¶ 211. EBTA-GUI is based on the industry-standard maintenance and repair application-to-application EBTA interface. See id. ¶ 213. Using the EBTA-GUI, CLECs are able to conduct a Mechanized Loop Test ("MLT"); create a trouble ticket; obtain trouble status on a dynamic basis, without issuing a query; request cancellation of trouble tickets; modify trouble tickets; and obtain trouble history reports of trouble tickets opened with the interface. See id. ¶ 211 & nn.90-91. EBTA-GUI also enables CLECs to open trouble tickets on the day that service is provisioned, even before the service orders are updated in Pacific's back-end systems. See Motta Aff. ¶ 17 n.8; Texas Order ¶ 204. These are the maintenance and repair

[43] Provisioning of unbundled loops is discussed in Part II.D, infra.

functions available to Pacific's retail operations.[44] In July 2002 alone, SBC's EBTA platform processed more than one million CLEC transactions for local exchange service. See Huston/Lawson Joint Aff. ¶ 214.

TBTA is a graphical user interface developed by SBC that has been available to CLECs in California since July 2000. See id. ¶ 215. CLECs opting to use TBTA are able to conduct MLT tests, create trouble tickets, and obtain trouble status, trouble history, and trouble report lists. See id. As with the EBTA-GUI interface, CLECs using TBTA can open trouble tickets on the day that service is provisioned. See Motta Aff. ¶ 17 n.8.[45]

Pacific's maintenance and repair performance demonstrates that competing carriers are able to diagnose and process customer trouble complaints with the same speed and accuracy as Pacific. For example, from May through July 2002, Pacific consistently met – and in many cases exceeded – the relevant standard for average time to restore service. See Johnson Aff. Attach. B (PM 21). Likewise, Pacific resolves most CLEC POTS service outages faster than it resolves its retail outages. See id. Attach. B (PM 22).

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[44] CLECs opting to use the EBTA application-to-application interface have the ability to integrate that interface with their own systems. See Huston/Lawson Joint Aff. ¶ 213. The same functions available through the EBTA-GUI are also available through the EBTA application-to-application interface, with the exception of trouble history and trouble lists. See id.

[45] EBTA-GUI and TBTA also permit CLECs to open trouble tickets electronically even when the Loop Maintenance Operations System ("LMOS") indicates that another carrier is the owner of the line or that the line is disconnected or ported out. See Motta Aff. ¶ 17. Accordingly, although CLECs made unsubstantiated claims before the California PUC that Pacific's LMOS had the same purported problems that some CLECs claimed occurred with SWBT's LMOS – and which this Commission ultimately concluded were minor and had no competitive impact, see Arkansas/Missouri Order ¶ 35 – the enhanced functionality of Pacific's maintenance and repair interfaces ensures that CLECs in California can open trouble tickets electronically on UNE-P lines even if there were errors in LMOS. See Motta Aff. ¶¶ 17-20.

d. Billing

Pacific offers CLECs a choice of three different electronic interfaces for billing, which allow them to bill their customers, to process their customers' claims and adjustments, and to view Pacific's bill for services provided to the CLEC. See Huston/Lawson Joint Aff. ¶¶ 218-219 (EDI); id. ¶ 220 (Bill Data Tape); id. ¶ 221 (Usage Extract). Using these interfaces, CLECs may obtain the information necessary to bill their customers, process claims and adjustments, and view Pacific's bill for services provided to CLECs. See id. ¶ 217. Through these interfaces and the range of available billing media, Pacific provides access to all usage data that CLECs have requested and Pacific's systems are capable of providing. See Flynn Aff. ¶¶ 4-10.

Pacific provides CLECs with nondiscriminatory access to billing functions, enabling them to provide accurate and timely bills to their customers. See New Jersey Order ¶ 121; Kansas/Oklahoma Order ¶ 163. From May through July 2002, Pacific distributed 100 percent of wholesale bills on time and met the parity standard for the distribution of usage charges in each of the three months. See Johnson Aff. ¶¶ 89, 92 & Attach. B (PMs 28, 30). Pacific has also met or exceeded the standards in at least two of the past three months on every billing accuracy submeasurement established by the California PUC for which there was data from May through July 2002. See id. ¶¶ 88-94.

e. OSS Support

Pacific offers CLECs a wide variety of information about, and assistance in using, its OSS, including its Local Service Center, Local Operations Center, Account Teams, CLEC OSS Training Organization, Information Services ("IS") Call Center, Mechanized Customer

Production Support Center, and OSS CLEC Support Team. See Huston/Lawson Joint Aff. ¶¶ 84-99; Henry Aff. ¶ 9.

Materials and Training. Pacific provides competing carriers with the specifications necessary for those carriers to design or modify their systems in a manner that will enable them to communicate with Pacific's systems and CLEC interfaces. See Huston/Lawson Joint Aff. ¶¶ 84-90; see also New York Order ¶¶ 88 n.216, 106 n.290, 127 n.364; Second Louisiana Order ¶ 113. The adequacy of Pacific's documentation is demonstrated by the fact that at least 60 competing carriers have constructed EDI interfaces. See Huston/Lawson Joint Aff. ¶ 233; see also Kansas/Oklahoma Order ¶ 152; Texas Order ¶ 120. In addition, the third-party tester was also able to build, and use, an EDI interface with Pacific's documentation. See Huston/Lawson Joint Aff. ¶¶ 48-49. The third-party test also included a review and validation of Pacific's CLEC documentation. See id. ¶ 71; Texas Order ¶ 146.

Pacific also offers CLECs 11 OSS classes, with 24.5 class days of training, as well as 19 workshops, which provide an additional 27 days of training. See Huston/Lawson Joint Aff. ¶ 89. This training is provided as part of the 13-state SBC training program, although the instructors that work with California CLECs are specifically assigned to the Pacific/Nevada Bell region. See id. ¶ 84. All of the classes and workshops use the "Train the Trainer" format, enabling CLEC employees who attend the sessions to return to their businesses with the take-home information provided and, in turn, train their employees as appropriate. See id. ¶ 86; see also Texas Order ¶ 145. The classes and workshops cover all areas of CLEC interaction with Pacific's electronic and manual OSS and many are cumulative, building from one class to the next. See Huston/Lawson Joint Aff. ¶¶ 87-88.

Change Management. Pacific's change management process formed the basis for SBC's uniform, eight-state change management process ("CMP") – also including SNET, Nevada Bell, and the five SWBT states. See id. ¶ 224. The Commission reviewed and approved the eight-state CMP on two separate occasions, finding that it provides an efficient competitor a meaningful opportunity to compete. See id. ¶ 223; Texas Order ¶ 110; Kansas/Oklahoma Order ¶ 166. In March 2001, SBC expanded that CMP to include all 13 SBC states. See Huston/Lawson Joint Aff. ¶ 224. All of the elements of the eight-state, Commission-approved plan are found in the new CMP – such as the "go/no go" voting process and implementation of versioning – and any differences were implemented at the request and/or for the benefit of CLECs. See id. ¶¶ 224-225 & Attach. BB; see also id. ¶¶ 251-253 (Pacific supports versioning); Kansas/Oklahoma Order ¶ 167. For example, SBC agreed to support three versions of software on application-to-application interfaces and agreed to provide notification to CLECs regarding legacy, or backend, system releases. See Huston/Lawson Joint Aff. ¶ 224. The same 13-state CMP that currently operates in California was in place when this Commission reviewed and approved SWBT's Arkansas and Missouri application. See id.; Arkansas/Missouri Order ¶ 15 & n.32.[46] Accordingly, there can be no doubt that Pacific's CMP satisfies FCC requirements.

[46] The Commission has found that where a BOC provides evidence that a particular system or process previously reviewed and approved in a prior order is also used in the state for which a current application has been filed, the Commission's review of the same system in this proceeding will be informed by its prior findings. See Kansas/Oklahoma Order ¶ 35; Massachusetts Order ¶ 48. Pacific's CMP was also reviewed during the OSS test, with the third-party tester concluding that the "Change Management Process was highly organized and thought out." TAM Report § 3.5; see Huston/Lawson Joint Aff. ¶ 79.

Testing Environment. Pacific likewise provides CLECs access to a stable testing environment that allows carriers to certify that their OSS will interact effectively with Pacific's OSS. See Huston/Lawson Joint Aff. ¶¶ 242-250; see also Kansas/Oklahoma Order ¶ 168; Texas Order ¶ 133. Pacific's testing environment mirrors the production environment, affords competing carriers an opportunity to test representative pre-ordering and ordering transactions, and offers the extended testing periods that competing carriers need for EDI implementation and new release testing. See Huston/Lawson Joint Aff. ¶¶ 242-243, 248-249; see also Kansas/Oklahoma Order ¶ 168.[47] As of December 2001, CLECs have also had the ability to test their integration of pre-ordering and ordering information. See Houston/Lawson Joint Aff. ¶ 250. Twenty-one of the more than 60 CLECs currently using EDI have at one time or another utilized Pacific's test environment, and at least sixteen CLECs have used the joint test environment to test the last several releases. See id. ¶ 242.

C. Checklist Item 3: Poles, Ducts, Conduits, and Rights-of-Way

Section 271(c)(2)(B)(iii) requires a BOC to provide "[n]ondiscriminatory access to the poles, ducts, conduits, and rights-of-way owned or controlled by the [BOC] at just and reasonable rates in accordance with the requirements of section 224." 47 U.S.C. § 271(c)(2)(B)(iii). In satisfaction of this requirement, over 70 CLECs have effective

[47] Before the state commission, AT&T complained that Pacific's test environment does not adequately mirror the production environment because in California it contains account information only for the Northern California region. In fact, the test environment mirrors the production environment in both regions, because the EDI mapping for formatting an LSR, the system edits, and the business rules for populating an LSR are the same for Pacific's Northern and Southern California operating areas. See Huston/Lawson Joint Aff. ¶ 245. Testing the same order scenario in both regions would be duplicative. See id. ¶ 246.

agreements to gain access to Pacific's poles, conduits, and rights-of-way, and Pacific has furnished CLECs with approximately 45,000 pole attachments and access to approximately 14.5 million feet of conduit space in California. See Reisner Aff. ¶¶ 14-15 (App. A, Tab 16). This provisioning is "business as usual," because Pacific has been providing surplus space on poles and in conduits to third parties under various agreements for more than 20 years. See id. ¶ 4.

The California PUC has certified to this Commission that it regulates the rates, terms, and conditions of access to poles, ducts, conduits, and rights-of-way in conformance with sections 224(c)(2) and (3), and has adopted a set of rules governing access in Appendix A to its Decision 98-10-058.[48] See Reisner Aff. ¶¶ 6-11. Under these rules, and in compliance with section 224(c) of the Act, Pacific may negotiate the terms and conditions of access, as long as the proposed terms are not unfairly discriminatory or anticompetitive. Id. ¶ 7. Moreover, the California PUC held, in its Blueprint Decision, that Pacific is providing nondiscriminatory access to its poles, ducts, conduits and rights-of-way, and that Pacific has satisfied the requirements of this checklist item. See also Reisner Aff. ¶ 12.

Pacific makes unassigned pole, duct, conduit, or right-of-way space available to all telecommunications carriers and cable operators, on a first-come, first-served basis. See id. ¶¶ 18-26. Pacific evaluates CLECs' requests for access to poles, ducts, conduits, and rights-of-way by using the same capacity, safety, reliability, and engineering standards that apply to Pacific's own use of the facilities. Id. ¶ 39. Pacific responds to applications within a 45-day

[48] Opinion, Order Instituting Rulemaking on the Commission's Own Motion into Competition for Local Exchange Service, D.98-10-058 (Cal. PUC Oct. 22, 1998) ("Local Exchange Service Rulemaking Decision") (App. C, Tab 38).

interval[49] and, upon confirmation that the applicant wishes to move forward, provides in writing what modifications, if any, are necessary, and what the estimated costs for those modifications will be. Reisner Aff. ¶¶ 28-29; Local Exchange Service Rulemaking Decision App. A, Rule IV.B.1; AT&T Agreement Attach. 10 – Ancillary Functions, § 3.3.1. In the unusual event that Pacific must deny access – for reasons of lack of capacity, safety, reliability, or generally applicable engineering purposes – it will do so in writing, including all relevant evidence and explanations, and will promptly contact the applicant, so that alternatives may be discussed. Reisner Aff. ¶ 29.

D. Checklist Item 4: Unbundled Local Loops

Checklist Item 4 requires a BOC to make local loop transmission from a central office to customer premises available on an unbundled basis. See 47 U.S.C. § 271(c)(2)(B)(iv). In order to establish compliance with this checklist item, a BOC must demonstrate that it: (i) has a concrete and specific legal obligation to provide unbundled loops; (ii) is furnishing quality loops in quantities that competitors reasonably demand; and (iii) provides nondiscriminatory access to local loop transmission. E.g., Kansas/Oklahoma Order ¶ 178; Texas Order ¶¶ 247-248; New York Order ¶ 269. Compliance with Checklist Item 4 is measured by reviewing Pacific's loop offerings in the aggregate. See AT&T Corp. v. FCC, 220 F.3d 607, 624 (D.C. Cir. 2000).

Pacific fully complies with this checklist item, allowing CLECs to provide local service without matching Pacific's large, sunk investments in facilities that connect each customer

[49] The 45-day interval is applicable unless the request for space involves more than 500 poles or five miles of conduit, or requires the calculation of pole loads by a joint owner, or the scope and complexity of the request warrant longer deadlines. See Reisner Aff. ¶ 28; AT&T Agreement Attach. 10 – Ancillary Functions, § 3.3.1.

premises to the public switched telephone network. Pacific offers CLECs a range of options for obtaining these loops on a pre-assembled basis or in combination with the CLECs' existing facilities. As previously discussed, Pacific has provisioned nearly half a million stand-alone loops in California. See J.G. Smith Aff. Attach. A. In addition, Pacific has established nondiscriminatory processes and procedures for the provisioning of xDSL-capable loops and related services, and Pacific has complied fully with its obligations under the Line Sharing Order, the Line Sharing Reconsideration Order,[50] and the UNE Remand Order. See supra Part II.B.

1. Nondiscriminatory Access to Unbundled Loops Used for Advanced Services

Pacific has processes and procedures in place to ensure that CLECs receive nondiscriminatory access in the pre-ordering, ordering, and provisioning of xDSL-capable loops and related services, and the HFPL. See generally Chapman Aff. These systems have been tested through extensive commercial usage in California. Pacific's performance in pre-ordering, ordering, provisioning, and maintenance of xDSL-capable loops demonstrates that Pacific offers competing carriers nondiscriminatory access to xDSL-capable loops in California. See Kansas/Oklahoma Order ¶¶ 182-183; Texas Order ¶ 284.

[50] Third Report and Order on Reconsideration in CC Docket No. 98-147, Fourth Report and Order on Reconsideration in CC Docket No. 96-98, Third Further Notice of Proposed Rulemaking in CC Docket No. 98-147, Sixth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, Deployment of Wireline Services Offering Advanced Telecommunications Capability, 16 FCC Rcd 2101 (2001); see also Order Clarification, Deployment of Wireline Services Offering Advanced Telecommunications Capability, 16 FCC Rcd 4628 (2001).

Furthermore, Pacific has implemented a fully operational separate affiliate for the provision of all advanced services. SBC Advanced Solutions Inc. ("ASI") is SBC's exclusive provider of advanced services in California. See Habeeb Aff. ¶ 4 (App. A, Tab 8). ASI orders facilities and services from Pacific using interfaces that Pacific has made available to CLECs, thus providing additional assurance that the available systems and procedures allow CLECs a meaningful opportunity to compete. See id. ¶ 6. Since line sharing became operational throughout Pacific's region, moreover, ASI orders the high-frequency portion of the loop ("HFPL") using the same interfaces used by other CLECs. Id. ¶ 10. ASI is operating in accordance with structural separation and nondiscrimination rules that the FCC established in the SBC/Ameritech Merger Order, and that accordingly "provide significant evidence that" Pacific provides nondiscriminatory access to loops used for advanced services. New York Order ¶ 331.

a. Pre-Ordering and Ordering xDSL-Capable Loops

Pacific's xDSL pre-ordering and ordering processes allow CLECs to offer their customers any type of xDSL service, subject only to national industry standards for spectrum management. See Chapman Aff. ¶ 5. These processes have been fine-tuned through extensive collaboration with the data CLECs, as well as through the highest commercial usage in the nation.

For pre-ordering, Pacific provides both unaffiliated CLECs and ASI nondiscriminatory access to actual loop make-up information through a combination of electronic and manual processes. See id. ¶¶ 13-43; Huston/Lawson Joint Aff. ¶¶ 150-152; see also, e.g., Massachusetts Order ¶ 68 (approving manual and electronic loop qualification processes). This loop "qualification" process provides CLECs with real-time electronic access to detailed information

regarding the suitability of particular loops for xDSL services. See Chapman Aff. ¶¶ 25-26. Pacific provides real-time access to actual loop make-up information contained in the Pacific databases, including the actual loop length and the presence of any xDSL-disturbing devices. See id. ¶ 25. When a CLEC requests loop make-up information, Pacific's loop qualification software interacts with Pacific's Loop Facilities Assignment and Control System ("LFACS") and searches first for a non-loaded copper loop connected to the specific customer premises for which LFACS contains actual loop make-up information. See id. ¶ 27. If a non-loaded copper loop is not found within the timeout period, Pacific will return information on a loop connected to the requested location in the following priority order: (a) loaded copper; (b) Digital Added Main Line; or (c) digital loop carrier. Id. In full compliance with Pacific's obligations under the UNE Remand Order, the loop qualification system will return actual loop make-up information for the requested location when such information is located in LFACS. See id. ¶¶ 10-11, 27-28. To the extent that actual loop make-up information is not available, Pacific provides real-time access to "designed" loop make-up information from a separate database.[51] See Chapman Aff. ¶ 15; Huston/Lawson Joint Aff. ¶¶ 151-152. CLECs also have the option of requesting electronically that Pacific's engineering personnel perform a manual search for the actual loop make-up information in Pacific's electronic databases and paper records. See Chapman Aff. ¶¶ 17, 29-30; Huston/Lawson Joint Aff. ¶ 152.

As Gwen Johnson explains in her affidavit, Pacific's performance in responding to loop qualification queries is easily sufficient to provide CLECs a meaningful opportunity to compete.

[51] "Designed" loop make-up information is based upon the standard design for the longest loop serving the end user's distribution area. See Chapman Aff. ¶ 15.

See Johnson Aff. ¶¶ 60-66 (discussing pre-order response times). On one particular sub-measure – response time for mechanized loop qualification queries (PM 105600) – Pacific has failed to meet the parity standard over the last several months. As explained in the affidavit of Stephen Huston and Beth Lawson, however, the difference in response times appears to stem from differences in the type of qualification queries submitted by CLECs and ASI – i.e., CLEC requests typically involve more loops, and therefore take more time to answer. See Huston/Lawson Joint Aff. ¶ 113. The difference, moreover, is only 2-3 seconds, out of a process that takes approximately 10 to 15 seconds for CLECs and ASI alike. See Johnson Aff. ¶ 63 & Attach B (PM 1-05600). This "minimal" disparity plainly has "little competitive impact." Massachusetts Order ¶ 71; see also id. ¶ 64 (approving an interim loop qualification process that returned LFACs information "within 2 hours").

To obtain loops for their advanced services, California CLECs use ordering processes that are largely analogous as those used to order ordinary, stand-alone unbundled loops. See Chapman Aff. ¶ 4. While these order flows and interfaces are themselves nondiscriminatory, ASI now uses these same systems in order to further ensure that CLECs receive nondiscriminatory access. See Habeeb Aff. ¶ 6. Pacific offers loop provisioning intervals for CLECs that are the same as or shorter than the intervals available to ASI. See Chapman Aff. ¶ 58.

CLECs have the option of selecting the precise loop conditioning they desire, and can even authorize (in their LSR) whatever conditioning is necessary to provision their desired service over a given loop. See id. ¶¶ 46-53. All necessary conditioning for loops of 12,000 feet

or less is performed automatically and without charge. Id. ¶¶ 54, 57. Interim rates for other types of conditioning were set in the OANAD proceeding. See Vandeloop Aff. ¶ 34.

b. Line Sharing

Pacific has implemented line sharing in California in accordance with this Commission's requirements, affording both data CLECs and Pacific's ASI affiliate the same opportunity to share the high-frequency portion of a Pacific voice line. See generally Chapman Aff. ¶¶ 65-90. After the Line Sharing Order was released, Pacific participated in SBC's regionwide collaborative line sharing trial, and, now that line sharing is commercially available, Pacific continues to work collaboratively with the CLECs on an ongoing basis to resolve issues as they arise. Id. ¶¶ 66, 69.

Pacific makes line sharing available to CLECs pursuant to approved interconnection agreements that fully comply with the Line Sharing Order and into which any CLEC can opt. See id. ¶ 84; Shannon Aff. ¶ 23; see also Interim Opinion, Open Access to Bottleneck Services D.00-09-074, 2000 WL 1875844 (Cal. PUC Sept. 21, 2000). A CLEC seeking alternative terms can negotiate them with Pacific. Chapman Aff. ¶ 84. CLECs may also obtain terms and conditions for xDSL-capable loops and line sharing from the multi-state generic agreement. Id. ¶ 3 & n.1.

The pre-ordering, ordering, and provisioning processes for the HFPL UNE are similar to those for an xDSL-capable loop. See id. ¶¶ 13, 65, 72, 85-86. California CLECs can utilize the same pre-ordering interface to obtain real-time loop make-up information for stand-alone or shared loops and to order a manual look-up of any actual loop make-up information not stored in Pacific's electronic databases. This detailed, customer-specific information permits the data